WHAT IS CLAIMED IS:

1. A sublimation ampoule comprising:

a sublimation container having an open end and a closed end, a sidewall and at least two chambers extending between the open end and the closed end, each chamber is separated by a container wall, each chamber having a surface area and a sublimation rate; and,

a container lid having a top surface and a bottom surface defining a thickness, the bottom surface removably securable to the open end of the sublimation container forming a fluid seal, the container lid comprising:

a lid inlet positioned on the top surface of the container lid, the lid inlet extending through the thickness;

a lid outlet positioned on the top surface of the container lid the lid outlet extending through the thickness;

at least one chamber inlet positioned on the bottom surface of the container lid fluidly connected to the lid inlet, each chamber inlet fluidly connected to a chamber of the at least two chambers, each chamber inlet having a cross-sectional area; and,

a conduit having a conduit inlet and a conduit outlet positioned on the bottom surface, the conduit inlet and conduit outlet extending partially into the thickness, the conduit fluidly connecting to two chambers of the at least two chambers, the conduit having cross-sectional area.

2. The sublimation ampoule of claim 1, further comprising heaters to facilitate heating of the sidewall of the sublimation container.

3. The sublimation ampoule of claim 1, wherein the closed end of the sublimation container is removably securable to the sidewall forming a fluid seal.

4. The sublimation ampoule of claim 1, further comprising an interior wall extending across the sidewall of the sublimation container, the interior wall separating the at least two chambers.

5. The sublimation ampoule of claim 1, further comprising a plurality of interior walls extending from a central longitudinal axis of the sublimation container to the sidewall of the sublimation container.

6. The sublimation ampoule of claim 1, further comprising a radial wall concentric with a central longitudinal axis of the sublimation container, the radial wall separating the at least two chambers.

7. The sublimation ampoule of claim 1, wherein the lid inlet is fluidly connected to a first chamber of the at least two chambers, and the lid outlet is fluidly connected to a second chamber of the at least two chambers.

8. The sublimation ampoule of claim 7, wherein a third chamber is fluidly connected to the first chamber by a second conduit, and the third chamber is fluidly connected to the second chamber by a third conduit, and the second chamber is fluidly connected to the lid outlet.

9. The sublimation ampoule of claim 1, wherein the lid inlet is fluidly connected to a second chamber inlet of the at least one chamber inlet defining a parallel connection of chambers.

10. The sublimation ampoule of claim 1, wherein the conduit includes a conduit inlet and at least two conduit outlets defining a parallel connection of chambers.

11. The sublimation ampoule of claim 1 further comprising at least one chamber outlet fluidly connected to the lid outlet, each chamber outlet fluidly connected to a chamber of the at least two chambers.

12. The sublimation ampoule of claim 1, wherein the sublimation container is subdivided into four chambers by an interior wall extending across the sidewall of the sublimation container and a radial wall concentric with a central longitudinal axis of the sublimation container.

13. The sublimation ampoule of claim 12, wherein a first chamber and a second chamber are separated by the interior wall, the first chamber in fluid communication with the lid inlet, the first chamber in fluid communication with the second chamber by at least one conduit.

14. The sublimation ampoule of claim 13, wherein a third chamber and a fourth chamber are adjacent to the sidewall of the sublimation container and are separated from the first chamber and second chamber by the radial wall, and the third chamber and forth chamber are separated by the interior wall, the fourth chamber in fluid communication with the lid outlet.

15. The sublimation ampoule of claim 1, wherein the cross-sectional area of the conduit is less than than the cross-sectional area of the lid inlet.

16. The sublimation ampoule of claim 1, wherein at least two conduits fluidly connect two chambers of the at least two chambers.

17. The sublimation ampoule of claim 1, wherein the conduit outlet includes a showerhead.

18. The sublimation ampoule of claim 1, wherein the at least one chamber inlet includes a showerhead.

19. A sublimation ampoule comprising:

a sublimation container having an open end and a closed end, a sidewall, and a central longitudinal axis, the sublimation container comprising:

an interior wall extending across the sidewall of the sublimation container;

a radial wall radial wall concentric with the central longitudinal;

a first chamber and a second chamber separated by the interior wall; and,

a third chamber and a fourth chamber and are separated from the first chamber and second chamber by the radial wall, and adjacent to the sidewall of the sublimation container; and,

a container lid having a top surface and a bottom surface defining a thickness, the bottom surface removably securable to the open end of the sublimation container forming a fluid seal, the container lid comprising:

a lid inlet positioned on the top surface of the container lid having a fixed inlet flow rate, the lid inlet extending through the thickness;

at least one chamber inlet positioned on the bottom surface of the container lid fluidly connected to the lid inlet, the chamber inlet in fluid communication with the first chamber; the chamber inlet having a cross-sectional area;

a lid outlet positioned on the top surface of the container lid having a fixed outlet pressure, the lid outlet extending through the thickness and in fluid communication with the fourth chamber; and,

a plurality of conduits having a conduit inlet and a conduit outlet positioned on the bottom surface, the conduit inlet and conduit outlet extending partially into the thickness, the conduit fluidly connecting the first chamber, the second chamber, the third chamber and the fourth chamber, each of the plurality of conduits having cross-sectional area.

20. The sublimation ampoule of claim 19, wherein the first chamber is in fluid communication with the second chamber by at least one conduit of the plurality of conduits.

21. The sublimation ampoule of claim 19, wherein the third chamber and fourth chamber are in fluid communication by at least one conduit of the plurality of conduits.

22. The sublimation ampoule of claim 19, wherein the third chamber and the first chamber are in fluid communication by at least one conduit of the plurality of conduits.

23. The sublimation ampoule of claim 19, wherein the fourth chamber and the second chamber are in fluid communication by at least one conduit.

24. The sublimation ampoule of claim 19, further comprising heaters configured to heat the sidewall of the sublimation container.